

IFW

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL  
FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	10/728803 ✓
Filing Date	8 December 2003
First Named Inventor	Kia Silverbrook
Art Unit	2853
Examiner Name	Geoffrey Mruk
Attorney Docket Number	MTB12US

## ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input checked="" type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD  <input type="text"/> Remarks _____ Email: <a href="mailto:kia.silverbrook@silverbrookresearch.com">kia.silverbrook@silverbrookresearch.com</a> Telephone: 61-2-9818 6633 Facsimile : 61-2-9555 7762	<input type="checkbox"/> After Allowance Communication to TC  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Original Return Receipt Postcard
---	---	--

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name			
Signature			
Printed name	Kia Silverbrook		
Date	May 1, 2007	Reg. No.	

## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name		Date	

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**COPY****Commonwealth Bank**Commonwealth Bank of Australia  
ABN 48 123 123 124

NOT OVER\*970\*DOLLARS

Branch BALMAIN LAN2 NSW

On Demand Pay  
to the Order of

COMMISSIONER FOR PATENTS

The sum of

NINEHUNDRED&amp;SEVENTYDOLLARS\*\*\*\*\*

To BANK OF AMERICA NA  
NEW YORK, NY

Date 26 October 2006

United States Currency

USD \*\*\*970.00\*\*\*\*\*

For Commonwealth Bank of Australia  
ABN 48 123 123 124

For SECURITY FEATURES see reverse of draft.

Manager

Accountant

11

**COPY**

MTB12



**SECURITY FEATURE**

This document is printed on sensitised, watermarked paper. For authentication please hold up to the light to view a Lock & Key watermark. The absence of this feature will indicate a fraudulent copy.

**ADDITIONAL SECURITY FEATURES**

- Invisible Fluorescence
- Thermochromic Ink
- Micro Printing
- Fine line security patterns

USSN 10/728863

our docket no: TITB12US



the United States Patent and Trademark Office

Serial Number: 10/728803  
Application Filed: December 8, 2003  
Applicant: Kia Silverbrook  
Application Title: THERMAL INK JET PRINthead WITH LOW RESISTANCE  
ELECTRODES FOR HEATERS  
Examiner/GAU: Geoffrey Mruk 2853  
Dated May 1, 2007  
At: Balmain, NSW  
Docket No. MTB12US

**PETITION TO WITHDRAW ABANDONMENT**

**(UNDER 37 CFR 1.181(a))**

Commissioner for Patents  
Washington, District of Columbia 20231

Dear Sir:

In response to the Notice of Abandonment we hereby lodge a petition to WITHDRAW HOLDING OF ABANDONMENT.

The Notice of Abandonment states that a reply to the Office Action mailed on October 13, 2006 was not received by the USPTO. We confirm that the reply was sent in response to the Office Action mailed on October 26, 2006. We therefore petition the commissioner to WITHDRAW HOLDING OF ABANDONMENT on this application.

The Applicant encloses:

- A copy of the Transaction History from PAIR, showing the following entry:  
*"Workflow – Request for RCE – Begin"* dated October 30, 2006.
- The original return receipt postcard confirming that the response (RCE including IDS and cheque) was received by the USPTO on November 7, 2006;
- A copy of the response sent (RCE including IDS and cheque).

The Applicant submits that the response to the Office Action mailed October 13, 2006 was sent to and received by the USPTO, and respectfully requests favourable consideration of this petition.

Very respectfully,

Applicant:



---

Kia Silverbrook

C/o:

Silverbrook Research Pty Ltd  
393 Darling Street  
Balmain NSW 2041, Australia

Email:

kia.silverbrook@silverbrookresearch.com

Telephone:

+612 9818 6633

Facsimile:

+61 2 9555 7762



10/728,803 Thermal Ink Jet Printheads with low resistance electrodes for heaters 04-30-2007::18:47:17

### Transaction History

Date	Transaction Description
03-30-2007	Mail Abandonment for Failure to Respond to Office Action
03-28-2007	Abandonment for Failure to Respond to Office Action
10-30-2006	Workflow - Request for RCE - Begin
10-13-2006	Mail Advisory Action (PTOL - 303)
10-11-2006	Advisory Action (PTOL-303)
10-04-2006	Date Forwarded to Examiner
10-02-2006	Amendment after Final Rejection
08-22-2006	Mail Final Rejection (PTOL - 326)
08-19-2006	Final Rejection
06-16-2006	Date Forwarded to Examiner
06-08-2006	Response after Non-Final Action
04-04-2006	Mail Non-Final Rejection
03-31-2006	Non-Final Rejection
01-23-2006	Information Disclosure Statement considered
12-16-2004	Information Disclosure Statement considered
01-30-2006	Date Forwarded to Examiner
01-23-2006	Response to Election / Restriction Filed
01-23-2006	Information Disclosure Statement (IDS) Filed
01-23-2006	Request for Extension of Time - Granted
12-01-2005	Mail Restriction Requirement
11-28-2005	Requirement for Restriction / Election
06-28-2005	Case Docketed to Examiner in GAU
12-16-2004	Reference capture on IDS
12-16-2004	Information Disclosure Statement (IDS) Filed
06-14-2004	Case Docketed to Examiner in GAU
04-20-2004	IFW TSS Processing by Tech Center Complete
04-20-2004	Case Docketed to Examiner in GAU
01-20-2004	Application Return from OIPE
01-20-2004	Application Return TO OIPE
01-16-2004	Application Return from OIPE
01-16-2004	Application Return TO OIPE
01-16-2004	Application Dispatched from OIPE
01-20-2004	Application Is Now Complete
01-12-2004	Cleared by OIPE CSR
12-27-2003	IFW Scan & PACR Auto Security Review
12-08-2003	Initial Exam Team nn

[Close Window](#)



# COPY

PTO/SB/30 (04-05)

Approved for use through 07/31/2006. OMB 0851-0031

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

## Request for Continued Examination (RCE) Transmittal

Address to:  
Mail Stop RCE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Application Number	10/728803
Filing Date	8 December 2003
First Named Inventor	Kia Silverbrook
Art Unit	2853
Examiner Name	Geoffrey Mruk
Attorney Docket Number	MTB12US

**This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.**  
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

1. **Submission required under 37 CFR 1.114** Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).
- a. ☒ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.
- i. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_
- ii. ☐ Other \_\_\_\_\_
- b. ☒ Enclosed
- i. ☐ Amendment/Reply
- iii. ☒ Information Disclosure Statement (IDS)
- ii. ☐ Affidavit(s)/ Declaration(s)
- iv. ☐ Other \_\_\_\_\_
2. **Miscellaneous**
- a. ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of \_\_\_\_\_ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)
- b. ☐ Other \_\_\_\_\_
3. **Fees** The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.
- a. ☐ The Director is hereby authorized to charge the following fees, any underpayment of fees, or credit any overpayments, to Deposit Account No. \_\_\_\_\_. I have enclosed a duplicate copy of this sheet.
- i. ☐ RCE fee required under 37 CFR 1.17(e)
- ii. ☐ Extension of time fee (37 CFR 1.136 and 1.17)
- iii. ☐ Other \_\_\_\_\_
- b. ☒ Check in the amount of \$ 970.00 enclosed
- c. ☐ Payment by credit card (Form PTO-2030 enclosed)

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2030.**

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED	
Signature Name (Print/Type) <u>Kia Silverbrook</u>	Date Registration No. <u>October 26, 2006</u>

### CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

Signature	Date
Name (Print/Type)	

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Substitute for form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(Use as many sheets as necessary)*

**Complete if Known**

Application Number	10/728,803
Filing Date	December 8, 2007
First Named Inventor	Kia Silverbrook
Art Unit	2853
Examiner Name	Geoffrey S. Mruk
Attorney Docket Number	MTB12US

Sheet	1	of	1
-------	---	----	---

## U. S. PATENT DOCUMENTS

[illegible]

**FOREIGN PATENT DOCUMENTS**

[illegible]Examiner  
SignatureDate  
Considered

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> See Kind Codes and USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-210951

(43)Date of publication of application : 31.07.2002

(51)Int.Cl. B41J 2/015

B41J 2/16

B81B 3/00

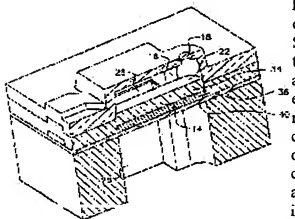
(21)Application number : 2001-355056 (71)Applicant : EASTMAN KODAK CO

(22)Date of filing : 20.11.2001 (72)Inventor : JARROLD GREGORY S  
LEBENS JOHN A

(30)Priority

Priority number : 2000 726945 Priority date : 30.11.2000 Priority country : US

## (54) THERMAL ACTUATOR



(57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a thermal actuator for a micro mechanical device having an actuator beam improved in the degree of motion.

**SOLUTION:** The thermal actuator is taught for the micro electromechanical device. The thermal actuator has a base element, and a cantilevered element extending from the base element and normally present at a first position. The cantilevered element includes a first layer formed of a dielectric material having a low thermal coefficient of expansion, and a second layer attached to the first layer and comprising an intermetallic compound or titanium aluminide. A pair of electrodes are connected to the second layer so as to raise the temperature of the second layer by flowing a current to the second layer. The cantilevered element is displaced to a second position as a result of the temperature rise of the

second layer, and returns to the first position when the current flowing to the second layer stops and the temperature of the second layer decreases. The thermal actuator has a specific application in an ink jet device in which a series of the ink jet devices form an ink jet printing head.

## LEGAL STATUS

[Date of request for examination]

21.10.2004

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 07-060955

(43)Date of publication of application : 07.03.1995

(51)Int.Cl. B41J 2/01

B41J 2/175

(21)Application number : 05-214031 (71)Applicant : CANON INC

(22)Date of filing : 30.08.1993 (72)Inventor : ASAI AKIRA

**(54) INK JET RECORDING HEAD AND INK JET RECORDER EQUIPPED WITH THE RECORDING HEAD**

$$i(r) = \frac{I}{\theta r d(r)}$$

$$q(r) = i(r)^2 \rho d(r)$$

$$q(r) = \frac{I^2 \rho}{\theta^2 r^2 d(r)}$$

**(57)Abstract:**

**PURPOSE:** To obtain a recording head having a novel heating element wherein heating distribution on a surface of a resistor is equalized and its recorder by a method wherein a heating resistor has a heating part of an approximately circularly annular or fan-like annular surface shape, and its thickness is varied inversely proportional to a distance in a radial direction from a central point of the surface shape.

**CONSTITUTION:** When voltage is impressed by making a current (I) flow radially along a radial direction of a heating resistor, a thickness d(r) of a heating part of the heating resistor is varied inversely proportional to a radial distance (r) from a center of a surface shape. Thereby, a current density i(r) at any point on the heating part at a radial distance (r) apart from the center comes to be as given by the formula (I). In the formula  $\theta$  is an angle of a fan-like annulus ( $2\pi$  in

the case of a circular annulus). Relation between 'the resistivity ( $\rho$ ) of the resistor and a heating value q(r) per unit time unit area is as given by the formula II. Therefore, the formula III is obtained.

**LEGAL STATUS**

[Date of request for examination]

30.06.1999

[Patent number]

3157964

[Date of registration]

09.02.2001